

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A cell disassembly device comprising:

a cell disassembly unit which disassembles an ATM cell received from an ATM circuit interface, extract data from payload, distributes data in plural STM time slots ~~divided and multiplexed in time in frame period~~ according to a sender, and sends out the distributed data to an STM circuit interface; and

a buffer ~~provided in unit~~, which includes an input stage and an independent STM buffer for each STM time slot, wherein the input stage converts between ATM and STM timing, and each STM buffer operates according to STM timing,

wherein said cell disassembly unit stores the data distributed in each STM time slot temporarily in said STM buffer, and absorbs fluctuations of ~~the transferring the ATM cell to the STM time slots.~~

2. (Currently Amended) The cell disassembly device according to claim 1, wherein said cell disassembly unit accumulates data after start of communication by writing data distributed in each STM time slot into ~~said the corresponding STM~~ buffer, reads out the data from said STM buffer, parallel to writing, when the data accumulated amount in said STM buffer reaches a prescribed amount, and sends out the read data to said STM circuit interface.

3. (Currently Amended) The cell disassembly device according to claim 2, further comprising a setting unit which sets the prescribed amount or a first prescribed time for reading out data from said STM buffer.

4. (Currently Amended) The cell disassembly device according to claim 3, further comprising a measuring unit which measures fluctuations of the ATM cell, wherein said setting unit sets the value of the prescribed amount or first prescribed time on the basis of the result of measurement by said measuring unit.

5. (Currently Amended) The cell disassembly device according to claim 2, wherein the prescribed amount or first prescribed time is set independently for each STM buffer, and said cell disassembly unit determines the reading-start timing ~~from said buffer~~ independently in each STM buffer.

6. (Currently Amended) The cell disassembly device according to claim 2, wherein the prescribed amount or first prescribed time is set independently for each virtual path, and said cell disassembly unit determines the reading-start timing ~~from said buffer~~ independently ~~in every~~ for each set of one or two or more STM buffers corresponding to each respective virtual path.

7. (Currently Amended) The cell disassembly device according to claim 6, wherein said cell disassembly unit starts reading out data from all STM buffers in said buffer unit

corresponding to ~~the~~ a same virtual path when the data accumulated amount reaches the prescribed amount or when the prescribed first time passes from the start of ~~communication,~~ communication in more than a specified number of STM buffers ~~out of one or two or more buffers~~ corresponding to ~~a~~ the same virtual path.

8. (Currently Amended) The cell disassembly device according to claim 6, wherein said cell disassembly unit starts reading out data from all STM buffers in said buffer unit corresponding to ~~the~~ a same virtual path when the data accumulated amount reaches the prescribed amount or when the prescribed first time passes from the start of ~~communication,~~ communication in all STM buffers ~~out of one or two or more buffers~~ corresponding to ~~a~~ the same virtual path.

9. (Currently Amended) The cell disassembly device according to claim 2, wherein said cell disassembly unit stops, when an underflow occurs in one of the STM buffers, reading out from the STM buffer having the underflow, and resumes reading out when the data accumulated amount reaches again the prescribed amount or when a second prescribed time passes after occurrence of the underflow.

10. (Currently Amended) The cell disassembly device according to claim 1, wherein said cell disassembly unit accumulates data after start of communication by writing data distributed in each STM time slot into one of said STM buffers, reads out the data from

said STM buffer, parallel to writing, after a first prescribed time passes, and sends out the read data to the STM circuit interface.

11. (Currently Amended) The cell disassembly device according to claim 10, further comprising a setting unit which sets a prescribed amount or the first prescribed time for reading out the data from said STM buffer.

12. (Currently Amended) The cell disassembly device according to claim 11, further comprising a measuring unit which measures fluctuations of the ATM cell, wherein said setting unit sets the value of the prescribed amount or first prescribed time on the basis of the result of measurement by said measuring unit.

13. (Currently Amended) The cell disassembly device according to claim ~~10~~ 11, wherein the prescribed amount or first prescribed time is set independently for each STM buffer, and said cell disassembly unit determines the reading-start timing ~~from said buffer~~ independently in each STM buffer.

14. (Currently Amended) The cell disassembly device according to claim 10, wherein the prescribed amount or first prescribed time is set independently for each virtual path, and said cell disassembly unit determines the reading-start timing ~~from said buffer~~ independently ~~in every~~ for each set of one or two or more STM buffers corresponding to each respective virtual path.

15. (Currently Amended) The cell disassembly device according to claim 14, wherein said cell disassembly unit starts reading data from all STM buffers in said buffer unit corresponding to ~~the~~ a same virtual path when the data accumulated amount reaches the prescribed amount or when the prescribed first time passes from the start of ~~communication,~~ communication in more than a specified number of buffers ~~out of one or two or more buffers~~ corresponding to ~~a~~ the same virtual path.

16. (Currently Amended) The cell disassembly device according to claim 14, wherein said cell disassembly unit starts reading action from all STM buffers in the buffer unit corresponding to ~~the~~ a same virtual path when the data accumulated amount reaches the prescribed amount or when the prescribed first time passes from the start of ~~communication,~~ communication in all STM buffers ~~out of one or two or more buffers~~ corresponding to ~~a~~ the same virtual path.

17. (Currently Amended) The cell disassembly device according to claim 10, wherein said cell disassembly unit stops, when an underflow occurs in the STM buffer, reading out from the STM buffer having the underflow, and resumes reading out when the data accumulated amount reaches again the prescribed amount or when a second prescribed time passes after occurrence of the underflow.

18. (Currently Amended) A cell disassembly method, the method comprising:

disassembling an ATM cell received from an ATM circuit interface, where the disassembling extracts data from payload, distributes data in plural STM time slots ~~divided and multiplexed in time in frame period~~ according to a sender, and sends out the distributed data to an STM circuit interface; and

storing the data distributed in each STM time slot temporarily in a respective STM buffer, which is implemented ~~provided in each a~~ buffer unit for that time slot, and absorbing fluctuations of transferring the ATM cell to the STM time slots,

wherein an input stage of the buffer unit converts between ATM timing and STM timing, and each STM buffer operates according to STM timing.

19. (Currently Amended) A computer-readable recording medium recording a computer program for causing a computer to execute a cell disassembly method, the method comprising:

disassembling an ATM cell received from an ATM circuit interface, wherein the disassembling extracts data from payload, distributes data in plural STM time slots ~~divided and multiplexed in time in frame period~~ according to a sender, and sends out the distributed data to an STM circuit interface; and

storing the data distributed in each STM time slot temporarily in a respective STM buffer, which is implemented ~~provided in each a~~ buffer unit for that time slot, and absorbing fluctuations of transferring the ATM cell to the STM time slots,

wherein an input stage of the buffer unit converts between ATM timing and STM timing, and each STM buffer operates according to STM timing.

20. (Currently Amended) The cell disassembly device according to claim 1, wherein the buffer in each STM time slot includes a configuration that determines the STM frame to which data read out from the STM time slot is issued without using predetermined frame boundary information.